

#5

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/531,965
Source: PCT
Date Processed by STIC: 4-27-05

ENTERED



PCT

RAW SEQUENCE LISTING

DATE: 04/27/2005

PATENT APPLICATION: US/10/531,965

TIME: 14:36:39

Input Set : A:\LeA 36 374.ST25.txt

Output Set: N:\CRF4\04272005\J531965.raw

3 <110> APPLICANT: Bayer AG, BHC
 4 Golz, Stefan
 5 Bruggemeier, Ulf
 6 Geerts, Andreas
 8 <120> TITLE OF INVENTION: Diagnostics and Therapeutics for Diseases Associated with
 Human
 9 Phosphodiesterase 10A (PDE10A)
 11 <130> FILE REFERENCE: Le A 36 374
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/531,965
 C--> 13 <141> CURRENT FILING DATE: 2005-04-19
 13 <150> PRIOR APPLICATION NUMBER: PCT/EP2003/011882
 14 <151> PRIOR FILING DATE: 2003-10-25
 16 <150> PRIOR APPLICATION NUMBER: EP02024996.7
 17 <151> PRIOR FILING DATE: 2002-11-08
 19 <160> NUMBER OF SEQ ID NOS: 5
 21 <170> SOFTWARE: PatentIn version 3.3
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 4576
 25 <212> TYPE: DNA
 26 <213> ORGANISM: Homo sapiens
 28 <400> SEQUENCE: 1
 29 gaattccggg cggcggcggc caaactccgc ggcgtcccca gggcgccacg ttcgccctcg 60
 31 ccgcccgggc cgcgctgctc ttgggtcccg acatggaaga tggaccttct aataatgcga 120
 33 gctgcttccg aaggctgacc gagtgcttcc tgagcccca agctaattgt atagatatag 180
 35 aagtcattcca cagagatgtt acagttgaag agatgggggt agagaagact ttgaaggaaa 240
 37 agaattgtaga atgaggatag aagagaggaa atcccaacat ttaacagggt tgacagatga 300
 39 aaaagtgaag gcatatcttt ctcttcaccc ccagggtatta gatgaatttg tatctgaaag 360
 41 tgttagtgcga gagacagtag agaaatggct gaagagggaag aacaacaaat cagaagatga 420
 43 atcagctcct aaggaagtca gcaggtagca agatacgaat atgcaggagg ttgtatatga 480
 45 actaaacagc tatatagaac aacggttgga cacaggagga gacaaccagc tactcctcta 540
 47 tgaactgagc agcatcatta aaatagccac aaaagccgat ggatttgac tgtatttcct 600
 49 tggagagtgc aataatagcc tgtgtatatt cacgccacct gggataaagg aaggaaaacc 660
 51 ccgcctcatc cctgctgggc ccatcactca gggcaccacc gtctctgctt atgtggccaa 720
 53 gtccaggaaa aactgctag tagaagacat ccttgagat gaacgatttc caagaggtag 780
 55 tggactggaa tcagggactc gtatccagtc tgttctttgc ttaccaattg tcaatgcaat 840
 57 tgggtgacttg attggtattc tcgagctgta tcggcactgg ggcaaagaag ccttctgtct 900
 59 tagtcaccag gaggttgcaa cagcaaattc tgcctgggct tcagtagcaa tacatcagg 960
 61 gcaggtagtc agaggccttg ccaaacagac agaattgaat gacttcctac tcgacgtatc 1020
 63 aaaaacatat tttgataaca tagttgcaat agattctcta cttgaacaca taatgatata 1080
 65 tgcaaaaaaac ctggtgaatg cagatcgttg tgcgcttttc cagggtggacc ataagaacaa 1140
 67 ggagttatat tcagacctt ttgatattgg atgagaaaag gaaggaaaac ctgtcttcaa 1200
 69 gaagacaaaa gagataagat tttcaattga gaaagggaatt gctggccaa tagcaagaac 1260
 71 aggggaagtc ctgaacattc cagatgccta tgcagacca cgctttaaca gagaagtaga 1320
 73 cttgtacaca ggctacacca cgcggaacat cctgtgcatg cccatcgtca gccgaggcag 1380

RAW SEQUENCE LISTING

DATE: 04/27/2005

PATENT APPLICATION: US/10/531,965

TIME: 14:36:39

Input Set : A:\LeA 36 374.ST25.txt

Output Set: N:\CRF4\04272005\J531965.raw

```

75 cgtgataggt gtggtgcaga tgggtcaacaa aatcagtggc agtgccttct ctaaaacaga 1440
77 tgaaaacaac ttcaaaatgt ttgcogtctt ttgtgcttta gccttacct gtgctaatat 1500
79 gtatcataga attcgccact cagagtgcac ttaccgggta acgatggaaa agctgtccta 1560
81 ccatagcatt tgtacttcag aagagtggca aggtctcatg caattcaccc ttcccgtgcg 1620
83 tctctgcaaa gaaattgaat tattccactt tgacattggc ctttttgaaa acatgtggcc 1680
85 tggaaatfff gtctacatgg ttcatcggtc ctgtgggaca tcctgctttg agcttgaaaa 1740
87 gttgtgtcgt ttattatgt ctgtgaagaa gaactatcgg cgggttcctt atcacaactg 1800
89 gaagcatgcg gtcactgtag cacactgcac gtatgccata cttcagaaca atcacacgct 1860
91 ttccacagac cttgagcgca aaggactgct gattgcgtgt ctgtgtcatg acctggacca 1920
93 caggggcttc agtaacagct acctgcagaa gttcgaccac cctctggccg ctctctactc 1980
95 cacttccacc atggagcagc accacttctc ccagactgtg tccatccttc agttggaagg 2040
97 gcacaatatc ttctccactc tgagctccag tgaatatgag caggtgcttg agatcatccg 2100
99 caaagccatc attgccacag acctgtcttt ataacttggg aacaggaagc agttggaaga 2160
101 gatgtaccag accggatcac taaaccttaa taatcaatca catagagacc gtgtaattgg 2220
103 ttgatgatg actgcctgtg acctttgttc tgtgacaaaa ctgtggcccg ttacaaaatt 2280
105 gacggcaaat gatatatatg cagaattctg ggctgagggt gatgaaatga agaaattggg 2340
107 aatacagcct attcctatga tggacagaga caagaaggat gaagtcccc aaggccagct 2400
109 tgggttctac aatgccgtgg ccattccctg ctatacaacc cttaccaga tcctccctcc 2460
111 cacggagcct cttctgaaag catgcaggga taatctcagt cagtgggaga aggtgattcg 2520
113 aggggaggag actgcaacct ggatttcac cccatccgtg gctcagaagg cagctgcac 2580
115 tgaagattga gcaactgtca cctgacacg ctgtcccacc tacagatcct catcttgctt 2640
117 ctttgacatt cttttccttt ttttgggggg ggtgggggga acctgcacct ggtaactggg 2700
119 gtgcaaacct cttcaagaag gtaacatcaa ataaataagt caagcagagg acttcctgcc 2760
121 aatctcttct gtgaggcatc atagacactg agcaaccagg accacccccca cgttcagaaa 2820
123 tcagctggcc aagtgactcc atttgacttg caaaccagcc ttttctaata ggctaattt 2880
125 gctgaggcct taaaggaaat ggacaaaaat tatccagaag gggtaacttt ccattgtatc 2940
127 tttctaataa gggtttaaaa tgggtactatt atgggtattgt acttgggctt taacatcaat 3000
129 gttgctttga tgttgttga tataaatagg aattttacac attactattg tgaatggtga 3060
131 atgttcatgt atgacctact tgaattaac ttgagtgtga gtccacagcc tcaggacaaa 3120
133 tgtcgttgag gttacagagt aagaaatgat ggcaaacgt caaactctta tttcagagct 3180
135 tcatgaattt agttagacta aacataattc ttttaagttca acctaaaggg ctgagatcaa 3240
137 taaatttaac actagacgaa gtagacttcc tgtctttttg agaagagatg aggtatatgt 3300
139 tacaataaat ctcagaactt caagtagcag ttcaaaagat gtcagttttt aaaattgttt 3360
141 ttgttgttgt cttggcagtt ttactgaacc ctttgcataa agaacaaaat aaaagctcgg 3420
143 cattgtaatt tttttaatgg acaagtctta tggatacagag gggtaacatt ttcataatga 3480
145 ttccctttata ttttactttt gtgtcatatg cagaatttta gactctcatt cacaatgaaa 3540
147 agttttatfff aaacattggt taattaaaat accatacagt tctcttttaa acatcaaacc 3600
149 ataaaaagtg tattttgtaa ttttactctg acctgccgca gtcacctctc acttatctct 3660
151 tccacgtact gcacggctcg atttcatgag ctttctgtcc atagcacaga aacagagcag 3720
153 aaagtagtac aatcatgttg gaccttcttt ctgttctctt tactcttctc acagatcaga 3780
155 tcaactcata gaagcctgtg ggtttcgatg gtttcttcta tacacctttt tggttgacca 3840
157 gtattactat acaatgtaag tgttttaaaa aatacgaaag taatactctg cacccttcc 3900
159 tacaagatg ataaagcagt cacttctggc gcattttaat aatttaaga tttttagtgc 3960
161 aatggcacgg taacctcaa acctgaatta gacagagact cactcaggaa gtgacaggcc 4020
163 catcatatca aataacttat tcacttttca tgtggcagga aactggaata tcgcttttaa 4080
165 taaaatggaa aaatatgctt ctacattatt accacatag gcgttttgtt catatgagcc 4140
167 tggtttgtgc aaaattaaat cagaggcttc tacaacatgg tttatttatg ttgtagcaaa 4200
169 gttggctcta cataaacatt gttcttattt taaaattaac actatgtgtt cagttttctt 4260
171 gtgggcttct gaaagttgcc atcttccctc cgtggagctc catttgctat tttcattata 4320

```

RAW SEQUENCE LISTING

DATE: 04/27/2005

PATENT APPLICATION: US/10/531,965

TIME: 14:36:39

Input Set : A:\LeA 36 374.ST25.txt

Output Set: N:\CRF4\04272005\J531965.raw

```

173 cactatgagg taaatgtaa taacaaaaga gagagaagta ccactgtggc tagatatata 4380
175 cacacacata tatatatgga tggatgtaat atatgtagca cacacacata gatgtatata 4440
177 ggatacacac tcatgtatgt aaacgtatac atatgtgtat atatgatata tacacatata 4500
179 cacacacgag agacagaagg aaagagagga agagagaagc aaacatgtag gaaaaaatat 4560
181 aaatcagccg gaattc 4576
184 <210> SEQ ID NO: 2
185 <211> LENGTH: 779
186 <212> TYPE: PRT
187 <213> ORGANISM: Homo sapiens
189 <400> SEQUENCE: 2
191 Met Arg Ile Glu Glu Arg Lys Ser Gln His Leu Thr Gly Leu Thr Asp
192 1 5 10 15
195 Glu Lys Val Lys Ala Tyr Leu Ser Leu His Pro Gln Val Leu Asp Glu
196 20 25 30
199 Phe Val Ser Glu Ser Val Ser Ala Glu Thr Val Glu Lys Trp Leu Lys
200 35 40 45
203 Arg Lys Asn Asn Lys Ser Glu Asp Glu Ser Ala Pro Lys Glu Val Ser
204 50 55 60
207 Arg Tyr Gln Asp Thr Asn Met Gln Gly Val Val Tyr Glu Leu Asn Ser
208 65 70 75 80
211 Tyr Ile Glu Gln Arg Leu Asp Thr Gly Gly Asp Asn Gln Leu Leu Leu
212 85 90 95
215 Tyr Glu Leu Ser Ser Ile Ile Lys Ile Ala Thr Lys Ala Asp Gly Phe
216 100 105 110
219 Ala Leu Tyr Phe Leu Gly Glu Cys Asn Asn Ser Leu Cys Ile Phe Thr
220 115 120 125
223 Pro Pro Gly Ile Lys Glu Gly Lys Pro Arg Leu Ile Pro Ala Gly Pro
224 130 135 140
227 Ile Thr Gln Gly Thr Thr Val Ser Ala Tyr Val Ala Lys Ser Arg Lys
228 145 150 155 160
231 Thr Leu Leu Val Glu Asp Ile Leu Gly Asp Glu Arg Phe Pro Arg Gly
232 165 170 175
235 Thr Gly Leu Glu Ser Gly Thr Arg Ile Gln Ser Val Leu Cys Leu Pro
236 180 185 190
239 Ile Val Thr Ala Ile Gly Asp Leu Ile Gly Ile Leu Glu Leu Tyr Arg
240 195 200 205
243 His Trp Gly Lys Glu Ala Phe Cys Leu Ser His Gln Glu Val Ala Thr
244 210 215 220
247 Ala Asn Leu Ala Trp Ala Ser Val Ala Ile His Gln Val Gln Val Cys
248 225 230 235 240
251 Arg Gly Leu Ala Lys Gln Thr Glu Leu Asn Asp Phe Leu Leu Asp Val
252 245 250 255
255 Ser Lys Thr Tyr Phe Asp Asn Ile Val Ala Ile Asp Ser Leu Leu Glu
256 260 265 270
259 His Ile Met Ile Tyr Ala Lys Asn Leu Val Asn Ala Asp Arg Cys Ala
260 275 280 285
263 Leu Phe Gln Val Asp His Lys Asn Lys Glu Leu Tyr Ser Asp Leu Phe
264 290 295 300
267 Asp Ile Gly Glu Glu Lys Glu Gly Lys Pro Val Phe Lys Lys Thr Lys

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/531,965

DATE: 04/27/2005

TIME: 14:36:39

Input Set : A:\LeA 36 374.ST25.txt

Output Set: N:\CRF4\04272005\J531965.raw

```

268 305          310          315          320
271 Glu Ile Arg Phe Ser Ile Glu Lys Gly Ile Ala Gly Gln Val Ala Arg
272          325          330          335
275 Thr Gly Glu Val Leu Asn Ile Pro Asp Ala Tyr Ala Asp Pro Arg Phe
276          340          345          350
279 Asn Arg Glu Val Asp Leu Tyr Thr Gly Tyr Thr Thr Arg Asn Ile Leu
280          355          360          365
283 Cys Met Pro Ile Val Ser Arg Gly Ser Val Ile Gly Val Val Gln Met
284          370          375          380
287 Val Asn Lys Ile Ser Gly Ser Ala Phe Ser Lys Thr Asp Glu Asn Asn
288 385          390          395          400
291 Phe Lys Met Phe Ala Val Phe Cys Ala Leu Ala Leu His Cys Ala Asn
292          405          410          415
295 Met Tyr His Arg Ile Arg His Ser Glu Cys Ile Tyr Arg Val Thr Met
296          420          425          430
299 Glu Lys Leu Ser Tyr His Ser Ile Cys Thr Ser Glu Glu Trp Gln Gly
300          435          440          445
303 Leu Met Gln Phe Thr Leu Pro Val Arg Leu Cys Lys Glu Ile Glu Leu
304          450          455          460
307 Phe His Phe Asp Ile Gly Pro Phe Glu Asn Met Trp Pro Gly Ile Phe
308 465          470          475          480
311 Val Tyr Met Val His Arg Ser Cys Gly Thr Ser Cys Phe Glu Leu Glu
312          485          490          495
315 Lys Leu Cys Arg Phe Ile Met Ser Val Lys Lys Asn Tyr Arg Arg Val
316          500          505          510
319 Pro Tyr His Asn Trp Lys His Ala Val Thr Val Ala His Cys Met Tyr
320          515          520          525
323 Ala Ile Leu Gln Asn Asn His Thr Leu Phe Thr Asp Leu Glu Arg Lys
324          530          535          540
327 Gly Leu Leu Ile Ala Cys Leu Cys His Asp Leu Asp His Arg Gly Phe
328 545          550          555          560
331 Ser Asn Ser Tyr Leu Gln Lys Phe Asp His Pro Leu Ala Ala Leu Tyr
332          565          570          575
335 Ser Thr Ser Thr Met Glu Gln His His Phe Ser Gln Thr Val Ser Ile
336          580          585          590
339 Leu Gln Leu Glu Gly His Asn Ile Phe Ser Thr Leu Ser Ser Ser Glu
340          595          600          605
343 Tyr Glu Gln Val Leu Glu Ile Ile Arg Lys Ala Ile Ile Ala Thr Asp
344          610          615          620
347 Leu Ala Leu Tyr Phe Gly Asn Arg Lys Gln Leu Glu Glu Met Tyr Gln
348 625          630          635          640
351 Thr Gly Ser Leu Asn Leu Asn Asn Gln Ser His Arg Asp Arg Val Ile
352          645          650          655
355 Gly Leu Met Met Thr Ala Cys Asp Leu Cys Ser Val Thr Lys Leu Trp
356          660          665          670
359 Pro Val Thr Lys Leu Thr Ala Asn Asp Ile Tyr Ala Glu Phe Trp Ala
360          675          680          685
363 Glu Gly Asp Glu Met Lys Lys Leu Gly Ile Gln Pro Ile Pro Met Met
364          690          695          700

```

RAW SEQUENCE LISTING

DATE: 04/27/2005

PATENT APPLICATION: US/10/531,965

TIME: 14:36:39

Input Set : A:\LeA 36 374.ST25.txt

Output Set: N:\CRF4\04272005\J531965.raw

```

367 Asp Arg Asp Lys Lys Asp Glu Val Pro Gln Gly Gln Leu Gly Phe Tyr
368 705          710          715          720
371 Asn Ala Val Ala Ile Pro Cys Tyr Thr Thr Leu Thr Gln Ile Leu Pro
372          725          730          735
375 Pro Thr Glu Pro Leu Leu Lys Ala Cys Arg Asp Asn Leu Ser Gln Trp
376          740          745          750
379 Glu Lys Val Ile Arg Gly Glu Glu Thr Ala Thr Trp Ile Ser Ser Pro
380          755          760          765
383 Ser Val Ala Gln Lys Ala Ala Ser Glu Asp
384 770          775
387 <210> SEQ ID NO: 3
388 <211> LENGTH: 22
389 <212> TYPE: DNA
390 <213> ORGANISM: Homo sapiens
392 <400> SEQUENCE: 3
393 ttttcaagct caaagcagga tg                                22
396 <210> SEQ ID NO: 4
397 <211> LENGTH: 22
398 <212> TYPE: DNA
399 <213> ORGANISM: Homo sapiens
401 <400> SEQUENCE: 4
402 acatgtggcc tggaattttt gt                                22
405 <210> SEQ ID NO: 5
406 <211> LENGTH: 22
407 <212> TYPE: DNA
408 <213> ORGANISM: Homo sapiens
410 <400> SEQUENCE: 5
411 cccacaggac cgatgaacca tg                                22

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/531,965

DATE: 04/27/2005

TIME: 14:36:40

Input Set : A:\LeA 36 374.ST25.txt

Output Set: N:\CRF4\04272005\J531965.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date